



South Coast Air Quality Management District

**Tesoro Carson Refinery (formerly BP Carson)
2017 Rule 1118 Quarterly Flare Emissions**

Emission Target

| | |
|---------------------------------|----------------------------------|
| 2017 SOx Emissions Target (lbs) | Year-to-Date SOx Emissions (lbs) |
| 95,200 | 3,537.5 |

Quarter I (January 1, 2017 - March 31, 2017):

| Flare ID | Total Gas Flow (scf) | Emissions (lbs) | | | | |
|----------------|----------------------|-----------------|----------------|--------------|----------------|-------------|
| | | PM-10 | NOx | ROG | CO | SOx |
| 5 Flare | 21,167,261 | 245.4 | 2,196.0 | 361.3 | 2,031.6 | 20.3 |
| FFHDS | 4,786,157 | 37.1 | 641.1 | 35.8 | 180.1 | 3.6 |
| HC | 10,199,899 | 78.5 | 1,315.7 | 78.8 | 401.5 | 32.0 |
| FCC | 6,861,901 | 53.5 | 878.1 | 52.3 | 265.9 | 10.5 |
| S. Flare-Coker | 9,655,152 | 73.2 | 1,254.3 | 73.3 | 372.1 | 28.0 |
| Total | 52,670,370 | 487.7 | 6,285.2 | 601.5 | 3,251.2 | 94.4 |

Quarter II (April 1, 2017 - June 30, 2017):

| Flare ID | Total Gas Flow (scf) | Emissions (lbs) | | | | |
|---------------|----------------------|-----------------|----------------|--------------|----------------|-------------|
| | | PM-10 | NOx | ROG | CO | SOx |
| 5 Flare | 14,214,982 | 106.6 | 1,847.9 | 99.5 | 497.5 | 11.3 |
| FFHDS | 7,482,556 | 56.2 | 972.5 | 52.7 | 263.7 | 5.7 |
| HC | 10,177,651 | 77.0 | 1,321.8 | 75.4 | 381.2 | 8.8 |
| FCC | 7,766,362 | 58.3 | 1,009.6 | 54.5 | 272.7 | 6.2 |
| S.Flare-Coker | 9,105,489 | 68.3 | 1,184.0 | 64.2 | 321.6 | 7.2 |
| Total | 48,747,040 | 366.4 | 6,335.8 | 346.3 | 1,736.7 | 39.2 |

Quarter III (July 1, 2017 - September 30, 2017):

| Flare ID | Total Gas Flow (scf) | Emissions (lbs) | | | | |
|---------------|-------------------------|-----------------|---------------|--------------|---------------|---------------|
| | | PM-10 | NOx | ROG | CO | SOx |
| 5 Flare | 12,933,548 | 175.0 | 1826.9 | 245.3 | 1362.5 | 11.6 |
| FFHDS | 7,602,561 | 86.6 | 1072.9 | 141.4 | 784.5 | 874.9 |
| HC | 10,291,576 | 124.4 | 1413.7 | 156.4 | 856.5 | 1706.8 |
| FCC | 7,705,445 | 58.2 | 996.9 | 56.0 | 282.4 | 7.2 |
| S.Flare-Coker | 10,222,612 | 77.4 | 1323.8 | 75.6 | 381.8 | 91.1 |
| Total | 48,755,742 | 521.6 | 6634.2 | 674.7 | 3667.7 | 2691.6 |

Quarter IV (October 1, 2017 - December 31, 2017):

| Flare ID | Total Gas Flow (scf) | Emissions (lbs) | | | | |
|---------------|-------------------------|-----------------|---------------|--------------|---------------|--------------|
| | | PM-10 | NOx | ROG | CO | SOx |
| 5 Flare | 12,904,903 | 96.8 | 1677.6 | 90.3 | 451.7 | 10.2 |
| FFHDS | 6,334,237 | 47.5 | 823.5 | 44.7 | 223.6 | 4.8 |
| HC | 10,909,074 | 81.9 | 1,418.0 | 76.6 | 382.9 | 8.8 |
| FCC | 6,779,434 | 51.0 | 881.4 | 48.4 | 242.9 | 5.4 |
| S.Flare-Coker | 9,574,394 | 72.9 | 1243.2 | 74.6 | 379.9 | 683.1 |
| Total | 46,502,042 | 350.1 | 6043.7 | 334.6 | 1681.0 | 712.3 |